

Claims

1. A printing unit of a rotary printing press, having a cylinder, roller or spindle, characterized in that an outside support surface (20, 25; 30, 35) is arranged between the barrel ends (05, 10) of a barrel (19) of the cylinder (01, 02; 22, 23), rollers (21) or spindle, and that a support device (03, 04, 24, 26, 27) is arranged outside of the barrel (19), which acts on this support surface (20, 25, 30, 35).
2. The printing unit in accordance with claim 1, characterized in that the support devices (03, 04, 24, 26, 27) are each fastened, fixed against relative rotation, on the cylinder/roller or spindle.
3. The printing unit in accordance with claim 1, characterized in that the support devices are each rotatably seated on the cylinder/roller or spindle.
4. The printing unit in accordance with claims 1 to 3, characterized in that the support device (03, 04, 24, 26, 27) is embodied as a circular support ring, which is supported on the cylinder/roller or spindle.
5. The printing unit in accordance with claims 1 to 3, characterized in that the support device (03, 04, 24, 26, 27) is embodied as a body having a bearing and at least one support surface.

6. The printing unit in accordance with claim 5, characterized in that the support surface is level.

7. The printing unit in accordance with claim 5, characterized in that the support surface is concavely curved.

8. The printing unit in accordance with claim 5, characterized in that the support surface is convexly curved.

9. The printing unit in accordance with claims 1 to 8, characterized in that a spindle (71) has only support devices (03, 04, 24, 26, 27).

10. The printing unit in accordance with claim 1 to 8, characterized in that cylinders/rollers are provided which are covered in the axial direction with several rubber blankets placed next to each other.

11. The printing unit in accordance with claim 1 to 8, characterized in that cylinders/rollers are provided which are covered in the axial direction with several printing plates placed next to each other.

12. The printing unit in accordance with claim 1 to 11, characterized in that the support devices (03, 04, 24, 26, 27) of directly adjoining cylinders, rollers, spindles (21 to 22, 22 to 23, 23 to 71, 71 to 67) are arranged so they can be brought into contact with each other.

13. The printing unit in accordance with claim 1 to 12, characterized in that the axes of rotation of the rubber blanket cylinder (37), forme cylinder (23), ink transfer cylinder (22) and roller (21), having structured surfaces, of a printing unit (45, 50) are located on a common plane (81, 82).

14. The printing unit in accordance with claim 1 to 12, characterized in that the axes of rotation of the rubber blanket cylinder (37), forme cylinder (23), ink transfer cylinder (22) and roller (21), having structured surfaces, of two printing units (45, 50) are located on a common plane (79) and form a printing component (40).

15. The printing unit in accordance with claim 14, characterized in that the common plane (79) extends horizontally.

16. The printing unit in accordance with claim 14, characterized in that the common plane (79) extends at an angle (α) in respect to the horizontal.

17. The printing unit in accordance with claim 13, characterized in that the planes (81, 82) of two printing units (45, 50) constituting a location, intersect at an acute right, or an obtuse angle (β).

18. The printing unit in accordance with claim 1, characterized in that the support surface (20, 25, 30, 35) is arranged approximately in the center of the barrel in respect to an axial direction of the cylinder (01, 02, 22, 23), roller (21) or spindle.

19. The printing unit in accordance with claim 1, characterized in that the support surface (20, 25, 30, 35) is embodied as a Schmitz ring.

20. The printing unit in accordance with claim 1, characterized in that at least three Schmitz rings are arranged on a cylinder, and that the Schmitz rings are arranged at a spacing which corresponds to a multiple of a width of a newspaper page.

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B6